



# How to repair the charging adapter of the Microsoft Surface Pro 3/4/5/6/7

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# INTRODUCTION

Due to design choices, in the connector of the Microsoft Surface Pro (3 and later) is prone to failure. The positive and negative wires short making the adapter unusable.

Fortunately the circuit is well designed and can resist a short, so it is sufficient to remove the short to get the adapter working again. It's an easy fix!

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## TOOLS:

Hand Sewing Needle (1)

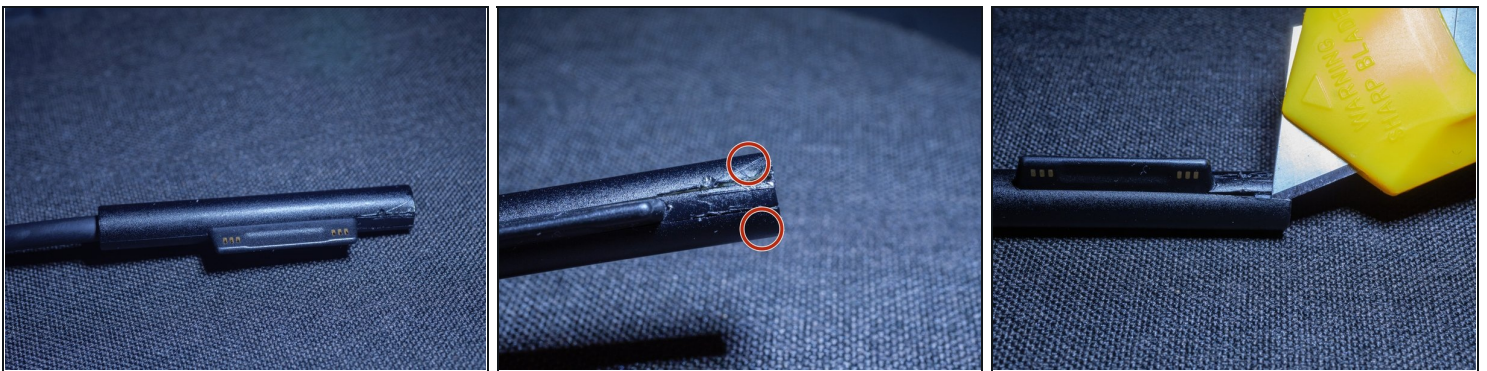
Precision Utility Knife (1)

Sewing Thread (1)

Tweezers (1)

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## Step 1 — Open the connector



- Open the connector by inserting a blade in the two slots on the end.
- Some glue spots are holding the outer case on the connector
- Detach the glue with a blade and proceed to next step

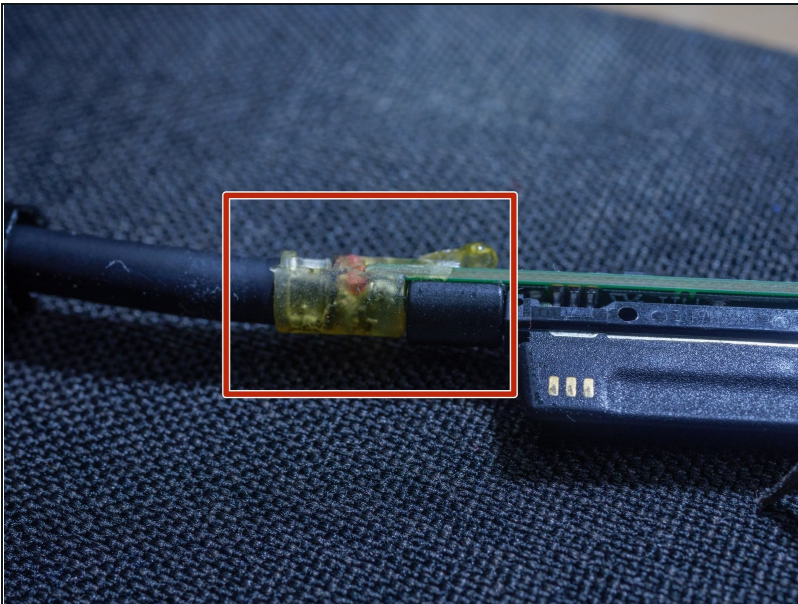


## Step 2 — Slide off the outer casing



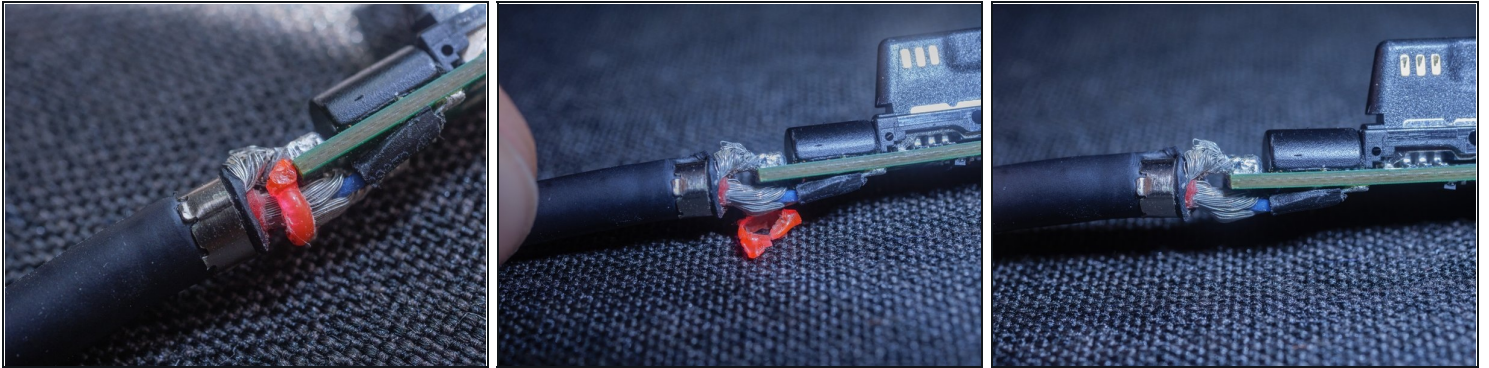
- Slide the outer case of the connector towards the cable side to uncover the connector

## Step 3 — Remove the resin



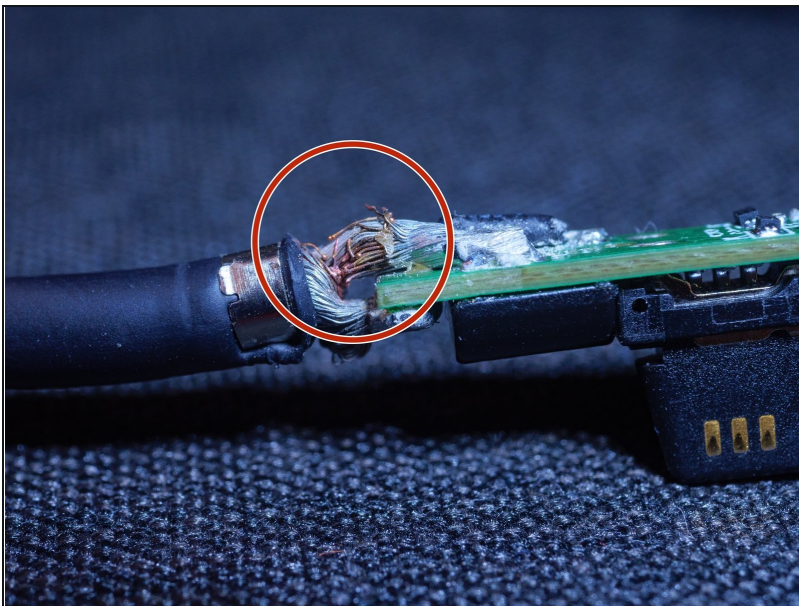
- With the help of a knife or a pair of [tweezers](#), remove the resin to uncover the wires.
- Be gentle!

## Step 4 — Remove the protective spacer



- Microsoft inserted this protective spacer to prevent short of the positive and negative conductors.
- Unfortunately this is not sufficient in many cases. We will replace this with a bigger spacer in the next step
- Remove the red spacer

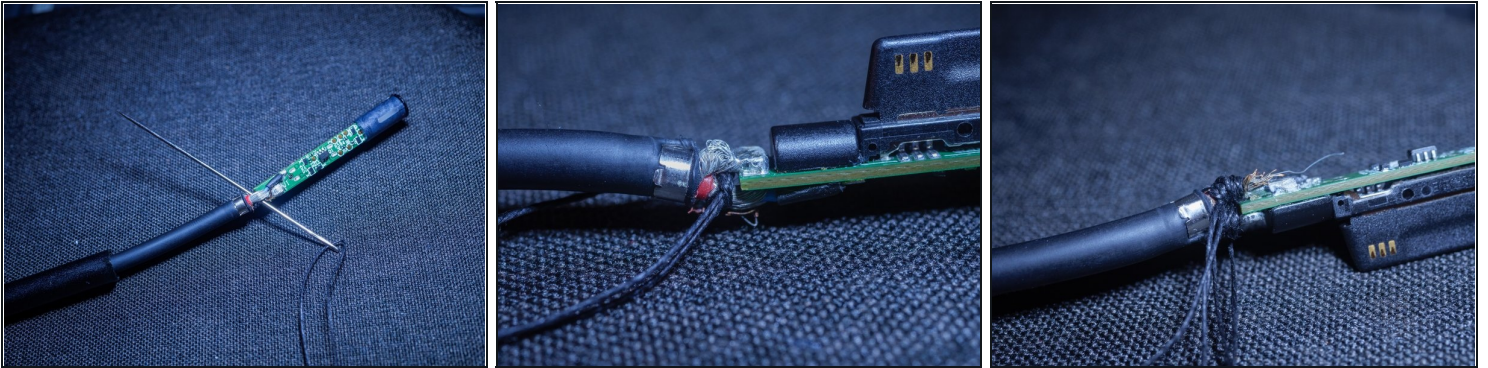
## Step 5 — The short



- Here is the short! Some threads burned, if they are not a significant portion, this can be ignored
- The two poles touched here, let's clean this area and remove any debris

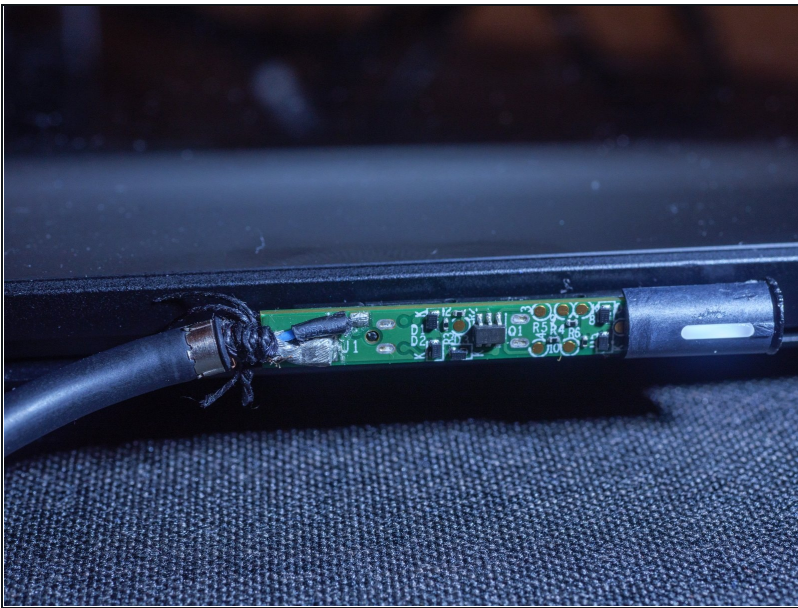


## Step 6 — Use a needle and a cotton thread to insulate again



- After clearing the connector from any wires that can touch, use a sewing needle and a cotton thread to well insulate the two wires
- Use multiple turns to ensure the two poles can never touch each other again

## Step 7 — Test



- Test that the adapter is working again before closing the connector. The white LED should turn on when plugged in your Surface Pro

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To reassemble your device, slide on again the protective outer casing